

Listing of Claims:

1. (previously amended) A method for diagnosing a malignant neoplasm in a mammal, comprising contacting a bodily fluid from said mammal with an antibody or fragment thereof which binds to an human aspartyl (asparaginy) beta-hydroxylase (HAAH) polypeptide under conditions sufficient to form an antigen-antibody complex and detecting the antigen-antibody complex, wherein an increase in antigen-antibody complex indicates an increase in HAAH level compared to a normal noncancerous control, said increase being indicative of a malignant neoplasm.

2. (originally filed) The method of claim 1, wherein said neoplasm is derived from endodermal tissue.

3. (originally filed) The method of claim 1, wherein said neoplasm is selected from the group consisting of colon cancer, breast cancer, pancreatic cancer, liver cancer, and cancer of the bile ducts.

4. (canceled)

5. (originally filed) The method of claim 1, wherein said bodily fluid is selected from the group consisting of a CNS-derived bodily fluid, blood, serum, urine, saliva, sputum, lung effusion, and ascites fluid.

6. (originally filed) The method of claim 1, wherein said antibody is a monoclonal antibody.

7. (previously amended) The method of claim 6, wherein said monoclonal antibody is produced by hybridoma ATCC designation PTA 3386.

8. (previously amended) The method of claim 6, wherein said monoclonal antibody is produced by a hybridoma selected from the group consisting of hybridoma ATCC designation PTA 3383, hybridoma ATCC designation PTA 3384, and hybridoma ATCC designation PTA 3385.

9. - 38. (canceled).

39. (previously amended) The method of claim 1, wherein said antibody is a single chain Fv molecule.

40. (previously amended) The method of claim 1, wherein said molecule is obtained from an antibody produced by hybridoma ATCC designation PTA 3386.

41. -42. (canceled)

43. (previously amended) The method of claim 1, wherein the antigen-antibody complex is detected by a label selected from consisting of an enzymatic label, a fluorescent label, a chemiluminescent label, a radioactive label, and a dye label.

44. (canceled)

45. (previously amended) A method of diagnosing a malignant neoplasm in a mammal, comprising contacting a bodily tissue from said mammal with an antibody or fragment thereof which binds to a HAAH polypeptide under conditions sufficient to form an antigen-antibody complex and detecting the antigen-antibody complex, wherein an increase in HAAH compared to a normal control indicates the presence of a malignant neoplasm and wherein said neoplasm is a hepatocellular carcinoma, wherein said antibody is produced by a hybridoma selected from the group consisting of hybridoma ATCC designation PTA 3383, hybridoma ATCC designation PTA 3384, and hybridoma ATCC designation PTA 3385.

46. (previously amended) The method of claim 1, wherein said neoplasm is a cholangiocarcinoma.

47. - 50 (canceled)

51. (previously amended) The method of claim 1, wherein said neoplasm is a glioblastoma.

52. (previously amended) The method of claim 1, wherein said neoplasm is a neuroblastoma.

53. – 54. (canceled).

55. (previously amended) A method of diagnosing a malignant neoplasm in a mammal, comprising contacting a bodily tissue from said mammal with an antibody or fragment thereof which binds to a HAAH polypeptide under conditions sufficient to form an antigen-antibody complex and detecting the antigen-antibody complex, wherein said antibody is produced by a hybridoma selected from the group consisting of hybridoma ATCC designation PTA 3383, hybridoma ATCC designation PTA 3384, and hybridoma ATCC designation PTA 3385 and wherein an increase in HAAH compared to a normal control indicates the presence of a malignant neoplasm.

56. (previously amended) The method claim 51, wherein said antibody is produced by hybridoma ATCC designation 3383.

57. (previously amended) A method of diagnosing a malignant neoplasm in a mammal, comprising contacting a bodily tissue from said mammal with an antibody or fragment thereof which binds to a HAAH polypeptide under conditions sufficient to form an antigen-antibody complex and detecting the antigen-antibody complex, wherein an increase in HAAH compared to a normal control indicates the presence of a malignant neoplasm and wherein said neoplasm is a pancreatic cancer.

58. (previously amended) The method of claim 1, wherein said antibody comprises a first HAAH-specific antibody and a second HAAH-specific antibody.

59. (previously amended) The method of claim 58, wherein said first antibody and said second antibody are produced by hybridomas selected from the group consisting of hybridoma ATCC designation 3386 and hybridoma ATCC designation 3383.

60. – 61. (canceled)